COMIDA DO AMANHÃ

ICLEI Governos Locais pela Sustentabilidade AMÉRICA DO SUL

POSITION PAPER

FOOD POLICY AND THE CLIMATE CRISIS: ADAPTATION AND MITIGATION STRATEGIES

A CONTRIBUTION TO THE DEBATE AT COP 30

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INTRODUCTION

In recent years, cities have been deeply affected by events resulting from the climate crisis. Yet, they also hold great potential to lead mitigation and adaptation responses to this crisis. Amid floods isolating neighborhoods, droughts disrupting harvests, and heat waves threatening public health, local governments have sought their own paths of resistance and care. The potential of food as a guiding axis for climate adaptation strategies is evident, but it remains underexplored by current public policies.

It is known that the way we produce, distribute and consume food is deeply intertwined with the climate emergency. The Intergovernmental Panel on Climate Change (IPCC, 2019), in its special report *Climate Change and Land*, consolidated fundamental data on food and land use systems (AFOLU), estimating that, when considering the emissions from pre- and post-production stages, the global food system accounts for 21% to 37% of net anthropogenic greenhouse gas emissions. According to the report, since 1961, population growth and increased per capita consumption of food, fiber and energy have led to unprecedented rates of land and water use, with agriculture accounting for about 70% of global freshwater use.

In Brazil, according to the Greenhouse Gas Emissions and Removals Estimates System (Alencar et.al., 2023), these emissions exceed the global average and correspond to over 73% of greenhouse gas emissions in 2021. The report Food Systems NDC[1] Scorecard – Brazil Assessment (2025) evaluated Brazil's Nationally Determined Contribution (NDC) from the perspective of food systems. The country obtained an average score of 6 out of 12 points, being classified as "weak" in the integration between food and climate.

1 NDCs (Nationally Determined Contributions) are commitments made by each signatory country to the Paris Agreement (2015) to reduce its greenhouse gas emissions and adapt to the impacts of climate change. Each country defines its own goals, strategies and deadlines, and must update them every five years, with progressively more ambitious targets, to contribute to the global goal of limiting the planet's average warming to 1.5°C above pre-industrial levels.

Although Brazil carries out robust actions in production, reduction of agricultural emissions and in combating undernutrition, the document points out gaps in crucial areas, such as processing, distribution and food waste. This indicates that the NDC does not yet fully recognize the transformative role of food in climate mitigation and adaptation.

Thus, building resilient food systems requires integrating food, climate, and biodiversity policies. The High-Level Panel of Experts on Food Security and Nutrition (HLPE-FSN, 2025) emphasizes that there is no dichotomy between feeding people and protecting the planet, and that public policies must align short-term responses to hunger with long-term adaptation and mitigation strategies. Therefore, investing in strategies that integrate food systems into the climate agenda, as proposed in Guia para Gestores Públicos: Sistemas Alimentares Circulares na América Latina (FAO e ICLEI, 2023), opens pathways for practices that foster circularity, prioritizing regenerative production, encouraging reuse and sharing, reducing pollution and resource input, and ensuring the recovery of inputs for future uses. Thus, resource cycles are closed and intersectoral synergies are created, for example, with water and energy systems, strengthening territorial resilience.

The adoption of circular initiatives can also reduce emissions from food waste and foster carbon sequestration, while generating new sources of sustainable energy, such as waste heat recovery or anaerobic digestion of organic waste, based on a development model that promotes economic growth combined with the rational use of natural resources and waste recovery (Porpino et al, 2025). The FAO Climate Change Strategy (2022–2031) identifies the circular and sustainable bioeconomy as a priority area for transforming agrifood systems and enhancing their resilience to the climate crisis (FAO, 2022).

Situations such as the Covid-19 pandemic and the worsening of climate-related disasters have revealed the vulnerability of food systems to simultaneous and interconnected shocks. In different urban contexts, it was observed that the most severe impacts occurred mainly in the stages of production and consumption: farmers lost crops and income; consumers faced food inflation; and logistics chains have suffered collapses (FAO; CIRAD; RUAF, 2024).

This diagnosis is reinforced by studies that highlight the importance of local responses to emergencies. While centralized national policies proved insufficient to deal with diverse territorial realities, initiatives such as community kitchens, urban gardens, and food banks proved to be more effective to face the emergency (Lee, Baik e Han, 2025). In Brazil, analyses of emissions in different types of food chains indicate that short-distance food chains, which bring production and consumption closer together, emit significantly less CO_2, pointing to opportunities for public food policies that also contribute to tackling the climate crisis (Conterato, Gazolla e Santos, 2024).

Experience has shown that cities strategically integrating food and climate policies are building systemic resilience, that is, the capacity to prevent, absorb, adapt and transform their food systems amid successive crises. This approach is in line with the concept of City Region Food Systems (FAO, 2024a), which emphasizes the connection between urban centers and their surrounding rural areas, integrating food production, distribution, and consumption with other strategic sectors, and promoting social, economic, and environmental sustainability.

Food policies should be structured based on five fundamental capacities (FAO, CIRAD e RUAF, 2024):

1. **Prevention:** through crop diversification, strengthening the local production base and regulatory stocks;
2. **Anticipation:** through climate monitoring and food emergency protocols;
3. **Absorption:** through public facilities such as community kitchens, popular restaurants and food banks;
4. **Adaptation:** through public procurement aligned with the seasonality and diversity of family farming;
5. **Transformation:** involving agroecological transition, infrastructure reform and new forms of inclusive governance.

Despite the need for transformative policies, most public policies remain absorptive and reactive, failing to promote structural transformation. Often food systems revert to their pre-shock functioning, missing the opportunity to promote deeper transformations (FAO; CIRAD; RUAF, 2024). Moreover, climate change is already directly affecting the four dimensions of Food and Nutrition Security – availability, access, utilization, and stability – with the most severe impacts on the poorest and most vulnerable populations, women, and traditional peoples (IPCC, 2022).

Thus, it is possible to understand that the hegemonic food system, based on monocultures and high consumption of ultra-processed products, not only favors the climate crisis but also harms human health, leading to what has been termed the global syndemic. This concept is characterized by the interaction of three interconnected problems: obesity, undernutrition, and climate change (Swinburn et al, 2019). This food system currently faces a food monotony characterized by low agricultural and livestock diversity, corporate control over seeds and animal genetics, monocultures and land concentration, intensive livestock farming, concentrated agricultural subsidies, and rapid growth in ultra-processed foods consumption. Recent studies identify a "triple monotony" in this context (Abramovay et al, 2025):

(i) **Agricultural monotony**, in which only six crops account for 75% of global calories, making production vulnerable to extreme weather events;

(ii) **Animal monotony**, with 40% of grain production destined for animal feed and 70% of agricultural land occupied by pastures;

(iii) **Dietary monotony**, in which the increasing consumption of ultra-processed foods and the standardization or low variety of fresh and minimally processed foods lead to the loss of dietary diversity and the global obesity pandemic.

The hidden costs of this food system are enormous and include both human health and environmental aspects. The negative impacts on people's health are estimated at approximately 11 trillion dollars per year, due to the prevalence of diet-related non-communicable diseases

such as diabetes and hypertension. Environmental costs are estimated at around 3 trillion dollars annually, resulting from the impacts of food production practices on ecosystems and the climate. Thus, by promoting instruments that internalize these externalities, policies designed under a multiple-benefit approach favor both social justice and economic and ecological sustainability (Ruggeri Laderchi et al., 2024).

In this sense, barriers to the transformation of food systems still persist, such as the lack of coordination between national and local policies, the low inclusion of community actors in planning processes, the scarcity of financing for food infrastructure, and the absence of clear indicators to measure transformation and resilience (IPES-Food, 2023). Despite this, collective initiatives led by communities, civil society organizations, and local governments have shown a greater capacity to generate lasting change, especially when coordinated with participatory governance strategies and intermunicipal networks.

To advance adaptation actions that create lasting solutions, it is therefore necessary to build food policies with a systemic, integrative, and long-term perspective. Among the possible pathways, the following stand out: (i) reviewing social food protection programs, focusing not only on emergencies, but on the structural reduction of vulnerability; (ii) strengthening local production and agroecological diversification, with investments in water security for food production, rural extension and the creation of resilient food infrastructure, such as decentralized markets, public kitchens, composting systems and local storage; and (iii) strengthening participatory governance, with permanent public policy councils, food and nutrition security councils, as well as monitoring and transparency mechanisms (FAO, 2025a).

The development of food policies at the municipal level not only ensures food on the plate: The way local governments design and implement such policies contributes to the care of water, soil, biodiversity, food heritage and the territory. Therefore, strengthening local food systems is one of the most effective ways to build climate

resilience with social justice, and this requires understanding food as a strategic and cross-cutting agenda, which can integrate health, environment, economy, and culture in lasting public solutions.

It is within this horizon that the Lab on Urban Food Policies (LUPPA) operates, developed by the Comida do Amanhã Institute in partnership with ICLEI South America. The initiative supports Brazilian municipalities in the collective construction of systemic, integrated and territory-based food policies, with a focus on social justice, climate action and public health. Through immersions, seminars, exchanges, and learning processes, LUPPA contributes to cities by transforming their food practices into structuring solutions, strengthening local experiences and coordinating networks between different sectors and scales of government (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024). Below, we further explore the importance of urban food systems and present experiences from cities participating in LUPPA.

CITIES THAT NOURISH THE FUTURE: LUPPA AND THE TRANSFORMATION OF URBAN FOOD POLICIES

Cities already consume over half of all food produced in the world. This figure will reach 80% by 2050, according to the global network of mayors of the world's major cities (Ellen Macarthur Foundation, 2019). In addition, it is estimated that 23.9% of the world's urban population lives in a situation of moderate or severe food insecurity (FAO et al, 2025b). At the same time, there is significant change in the population's nutritional profile: for the first time in history, obesity has surpassed undernutrition as the dominant form of global malnutrition (9.4% compared to 9.2%). This transformation occurs mostly in urban contexts, where there is a predominant supply of ultra-processed foods and a low availability of fresh products (UNICEF, 2025). This reinforces the urgency of a demand-driven urban food transition, in which cities lead the transformation of global food systems (C40 Knowledge Hub, 2025).

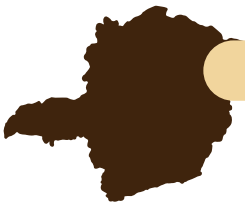
In this context, LUPPA has inspired a network of Brazilian local governments to place food at the center of solutions for a more resilient future for cities. Based on this space for cooperation, municipal managers from across the country join forces to develop an integrated agenda for local food systems, covering a spectrum of policies from combating hunger to fighting climate emergency, including income generation, the guarantee of rights, food education, regulation of healthy food environments, and regional development, among other fundamental issues for food policies.

The work carried out at LUPPA has received international recognition, both for its innovative methodology and for its ability to generate a support network of cities. In the reports State of Food Insecurity in the World 2024 (FAO et al., 2024b) and From Plate to Planet (IPES-Food, 2023), LUPPA is cited as an example of an innovative urban food policy laboratory with an impact on leveraging the transformation of food systems. In 2024, LUPPA was featured as a national network of cities in the report Strengthening Urban and Peri-urban Food Systems, prepared by the High-Level Panel of Experts on Food Security and Nutrition of the United Nations Committee on Food Security (HLPE, 2024). In addition, the program was a source of inspiration for the National Strategy for Food and Nutrition Security in Cities – Alimenta Cidades, launched in December 2023 by the Ministry of Social Development, through the National Secretariat for Food and Nutrition Security. In 2025, LUPPA was cited and recognized as one of the reference experiences in urban food policies with an integrated approach on the publication Transforming Food and Agriculture through a Systems Approach (FAO, 2025a), a report that explains and exemplifies the concept and importance of adopting a systemic approach to drive the transformation of food systems.

We therefore consider that it is within the concrete actions of each participating city – often small in scale, but large in impact – that the power of transformation is revealed. This is how the dimensions proposed by FAO, CIRAD e RUAF, 2024 for resilient food policies are put into practice: intersectoral governance, territorial planning, sustainable production, equitable access and food education.

In Santarém (PA), for example, the systematic introduction of socio-biodiversity products in school meals extends beyond the menu: it strengthens extractive economies, protects forest territories and reduces emissions by shortening the distance between the field and the table. It is a public policy that weaves together nutrition, social justice and environmental conservation with a single point of intersection: school meals. In Santarém, a study published by the Sustainable Finance Initiative (SFI, 2025) with support by Comida do Amanhã showed that 100% of municipal public schools are supplied with fresh and minimally processed items from local family farming, adjusting logistics to urban, riverside and highland contexts, an example of climate adaptation in the Amazon (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024; SFI, 2025).

In the Southeast region of the country, Maricá (RJ) has become a national and international reference by implementing edible gardens, known locally as Agroecological Squares. These public spaces have been transformed into territories for learning, plant growing, and community interaction. In the largest of them, there are over 60 crops distributed in 36 beds, where vegetables, fruits, non-conventional food plants and medicinal plants are grown collectively. Beyond serving as urban gardens, the Agroecological Squares teach the community to plant and to value the work of farmers, to promote food and nutritional security, to strengthen composting practices and to reduce waste. Since the creation of the first garden in 2020, Maricá has joined the Milan Pact, establishing itself as a model of commitment to sustainable and circular food systems (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024).



The city of Belo Horizonte (MG) has a well-stablished Food and Nutrition Security policy with an agroecology perspective, which seeks to integrate urban gardens with rainwater harvesting, agroecological fairs, a public bank with native and agroecological seeds (which received a special mention in the Milan Pact Award 2025, in the "Food Production" category), in addition to a system of public equipment counting on popular restaurants and food banks. The municipality has included the topic of climate change in its Food and Nutrition Security Policy, seeking to ensure sustainable food production systems and implement agricultural practices capable of withstanding climate change (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024).

In Porto Alegre (RS), throughout the 2024 floods, solidarity kitchens became strategic bases of nutritional and logistical support. One unit prepared over 117 thousand meals in a few weeks, with inputs from family farming (CAISAN-RS, 2025). The importance of these initiatives was recognized by the City Hall and the State Government, which integrated them into public policy by creating Pontos Populares de Soberania e Segurança Alimentar e Nutricional (Governo Estadual do Rio Grande do Sul, 2025), strengthening their infrastructure and integration with the local supply network. During extreme events, the city adapts food distribution routes and reactivates decentralized stocks, ensuring quality food even in crisis scenarios. These actions are developed based on guidelines from documents such as the Emergency Readiness Plan: A Guide for the School Foodservice Operation, by the National Food Service Management Institute (2003), which suggests that school food services be planned in advance for emergencies, through clear operating protocols, in addition to well-established partnerships with support agencies and local organizations. Porto Alegre's experience shows how solidarity kitchens can be permanent strategies for climate adaptation and urban food justice (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024).

In the Northeast region of the country, the municipality of Recife (PE) is notable for its urban agroecology and school meals based on fresh, minimally processed and locally sourced products. Despite the absence of a defined rural area in its master plan, the city established an Executive Secretariat for Urban Agriculture, which coordinates policies aimed at food production in urban areas, including rainwater harvesting practices and reuse of organic waste. These actions can potentially lower emissions associated with transport and consumption of ultra-processed foods, thereby contributing to addressing challenges related to water management and socio-environmental vulnerability in urban peripheries (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024).

The native seed banks, one of the highlights of the city of Belo Horizonte, are present in several municipalities participating in LUPPA, such as Alenquer (PA), which maintains a seed bank in coordination with other public initiatives, such as the agroecological seedling bank, the municipal market and agroecological fairs that strengthen the marketing of local and sustainable products (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024).

Another emblematic example of seed banks is in the municipality of Anchieta (SC), a national reference in the implementation of public policies for rescuing and preserving food genetic heritage. The municipality is a well-established center for conservation of native seeds, and it holds the Festival Gastronômico dos Milhos Crioulos. These structures ensure the preservation of seeds adapted to local realities, carefully cared for by family farmers, who promote productive autonomy, resist climate crises, and perpetuate ancestral knowledge about the cultivation of life (Instituto Comida Do Amanhã e Iclei América Do Sul, 2024).

These experiences add to the broader picture described in the report *Diálogo União Europeia – Brasil sobre Sistemas Alimentares Urbanos Sustentáveis*, which analyzed the actions carried out by the cities of Santarém, Maricá, Recife, Curitiba and Rio Branco. The publication highlights that circular urban food systems represent a concrete opportunity to replace the linear model of production, consumption and disposal, promoting practices such as composting, social gastronomy, and urban gardens, connecting rural and urban areas and strengthening sustainable public procurement. These strategies not only address the challenges of food insecurity and malnutrition but also contribute to local solutions to the climate crisis. Cities, according to the report, can be epicenters of transformation, coordinating intersectoral policies and involving multiple actors to drive fairer, healthier, and more resilient food systems (Tângari e Porpino, 2023).

Together, these policies form a network of resilience and innovation that positions cities as key actors of a necessary pact between food, climate and social justice. Beyond understanding food as a human and constitutional right, it is necessary to consider it a part of a wider strategy for urban resilience, for climate mitigation and for rebuilding the ties between people and territories. By placing the food system as a central axis in local public policies, municipalities point to a possible – and urgent – horizon for transformation.

PAYMENT FOR ENVIRONMENTAL SERVICES AND LOCAL GOVERNMENTS: INTERFACES WITH CLIMATE-RELATED ISSUES

The strength of food policies reveals that addressing the climate crisis requires recognizing the links between food and the environment. For this response to be sustainable and fair, it is essential to create financial instruments that value those who protect ecosystems and provide food to cities (HLPE-FSN, 2025). It is at this point that Payment for Environmental Services (PES) appears as a strategic link between conservation, social justice, and food systems.

The Payment for Environmental Services (PES), as defined by Brazilian legislation (Law No. 14,119/2021), is an economic incentive tool that can be both monetary and non-monetary. It is aimed at individuals or communities engaged in preserving or restoring ecosystems. The instrument operates under the principle of "provider-receiver" and "user pays", promoting fundamental ecosystem services, such as climate regulation, pollination, soil and water protection, and biodiversity conservation (MMA, 2017). These services are acknowledged as essential for sustaining planetary health (Whitmee et al., 2015) and are important both to the conservation of ecosystems and to the recognition of family farmers, traditional peoples and communities that inhabit and manage these territories (FAO, 2019).

In recent years, the adoption of Payment for Environmental Services programs has been strengthened at the state and municipal levels, although pioneering experiences have been underway since the mid-2000s. One of the most emblematic cases is the Water Conservation Program in Extrema (MG), considered the first municipal PES in the country (Pagiola, Von Glehn e Taffarello, 2013). This background shows that, even before the national institutionalization by Law No. 14,119/2021, local governments already played a leading role in developing policies aimed at environmental conservation, creating innovative arrangements that currently serve as reference for integrating ecosystem services and sustainable food systems.

The PES model is based on formalization of contracts, implementation of sustainable environmental practices by ecosystem service providers, and recognition and payment of these providers, creating direct and indirect benefits for society as a whole. According to the legislation, ecosystem services can be classified into four main modalities (Brasil, 2021):

1. Provision services, which supply environmental goods or products used by humans, such as water, food, wood and fibers;

2. Support services, responsible for maintaining life on Earth through processes such as nutrient cycling, pollination, seed dispersal, waste decomposition, and soil fertility renewal;

3. Regulatory services, which ensure the stability of ecosystems, including carbon sequestration, air purification, regulation of the hydrological cycle, erosion control, and moderation of extreme weather events;

4. Cultural services, which concern non-material benefits, such as cultural identity, recreation, tourism, and spiritual, aesthetic and intellectual development experiences.

Food systems and ecosystem services are deeply interconnected. Pollination, soil fertility and water regulation are vital processes for food production, while sustainable agricultural practices can transform production itself into a source of environmental services.

As an example, agroforestry – the incorporation and maintenance of trees in agricultural systems – represents a prominent alternative for its high potential for carbon sequestration, in addition to its direct contribution to food and nutritional security, equity, and biodiversity, among other positive impacts (Hart et al, 2023). Studies show that agroforestry systems can store up to 30% more carbon in the soil than areas of natural vegetation, reinforcing their strategic role in climate mitigation and in valuing ecosystem services (Embrapa, 2024).

Family farmers and traditional peoples and communities play a central role in the provision of these services. Their agroecological practices create results that surpass food production, encompassing the conservation of native seeds, the care of waters and springs, the maintenance of soil fertility and the preservation of local biodiversity. These practices directly contribute to climate regulation and to the resilience of ecosystems. These ways of life also include traditional agricultural technologies, such as roçados (small crop fields) in the Amazon, which are adapted to local geoecological conditions and integrate food production with environmental conservation. By aligning production with the geoclimatic conditions and biological diversity of each territory, these groups ensure both food and nutritional security and the maintenance of vital ecosystem functions (FAO, 2013).

A concrete example of these practices can be found in quilombola territories: according to MapBiomas (2023), from 1985 to 2022, the loss of native vegetation in these territories represented only 4.7%, compared to 17% in private areas over the same period. In the Atlantic Forest, one of the most pressured biomes, quilombola territories recorded a net gain of 7.8 thousand hectares of native vegetation, standing out as active conservation areas. These figures demonstrate that traditional community practices result in effective forest conservation and in the maintenance of ecosystem services that are fundamental to food systems.

Such actions contribute to the mitigation of climate change and to the adaptation of territories, ensuring productive resilience and food and nutrition security (FAO, 2019). PES, by recognizing and economically encouraging these actors, becomes a mechanism for strengthening local economies and promoting socio-environmental justice. In addition, global agricultural and energy subsidies surpass US$1 trillion per year, while 90% of the US$540 billion allocated to agriculture harms the environment by financing monocultures and chemical fertilizers (IPES-Food, 2025). In Brazil, this means that local PES policies and support for family farming and traditional peoples and communities can play a decisive role in redirecting financial flows towards agroecological and regenerative practices.

Successful examples of PES include public policies implemented across the three levels of government, as shown in the following examples.

At the municipal level, the City Hall of Ananindeua (PA) instituted, through Law No. 3,420/2024, its Municipal Program for Payment for Environmental Services, within the scope of the newly created Municipal System to Combat Climate Change. The initiative is coordinated by the Extraordinary Municipal Secretariat for Combating Climate Change, in partnership with the Secretariat of Fisheries and Agriculture, and is part of a broader set of policies aimed at forest conservation, REDD+ (Reduction of Emissions from Deforestation and Forest Degradation), creation of conservation units and promotion of the green economy (Prefeitura de Ananindeua, 2024).

In 2025, the first public notice prioritized quilombola communities, selecting 35 families to receive monthly payments of R$400.00 for 12 months, totaling R$168 thousand. The resources support actions to recover degraded areas, sustainable forest management and protection of springs and watercourses. In addition to the environmental dimension, the program fosters community practices that integrate traditional knowledge and climate adaptation, strengthening social inclusion, food security and local resilience. The policy seeks to acknowledge practices that are already part of the local way of living, such as collective reforestation, sustainable management of forest resources, the recovery of igarapés (small watercourses) and the work of waste collectors. By promoting these actions, the PES connects traditional knowledge to modern climate policy instruments, strengthening both social inclusion and the environmental resilience of the territory (Prefeitura de Ananindeua, 2024).

At the state level, Bahia stands out with Programa Estadual de Pagamento por Serviços Ambientais (PEPSA), established by Law No. 13,223/2015 and coordinated by the State Secretariat for the Environment (SEMA). It is a public PES system that combines monetary and non-monetary incentives, direct payments, certifications, technical assistance and environmental education, aimed especially at family farmers and traditional peoples and communities. The program seeks to strengthen the ecosystem services provided by these groups,

stimulating biodiversity conservation, recovery of degraded areas and sustainable use of natural resources. Among its actions, the project Guardiões das Águas dos Rios Joanes e Jacuípe stands out, as well as cooperation agreements with conservation organizations and territorial meetings of rural women, which strengthen the social and community character of the Program, integrating environmental conservation with social inclusion and sustainable territorial development (Governo Estadual da Bahia, 2015).

At the national level, the Floresta+Amazônia Project, implemented by the Ministry of the Environment in partnership with the United Nations Development Program (UNDP), illustrates how PES can reach family farmers and agrarian reform settlers, integrating forest conservation with diversified agricultural production. With a contribution of 96 million dollars from the Green Climate Fund, the initiative rewarded the conservation of almost 5 thousand hectares of forest, benefiting more than 700 families, most of them women farmers (BRASIL, 2024).

The program's modalities include direct payments to farmers who conserve or recover native vegetation areas, and support for participatory community projects, prepared by local organizations, promoting the collective management of territories. The project also fosters innovative solutions linked to the environmental services market and offers support to public institutions and cooperatives working to prevent deforestation. In addition to reducing socioeconomic vulnerabilities, it strengthens the role of Amazonian food systems as allies in combating the climate crisis (PNUD, 2025).

Strengthening local PES policies represents a strategic opportunity to align conservation, climate adaptation, and promotion of food and nutrition security. By recognizing family farmers and traditional peoples and communities as providers of environmental services, municipalities can increase resilience, foster sustainable food chains, and contribute to the achievement of the Sustainable Development Goals (SDGs).

The experiences of Ananindeua, Bahia and Floresta+Amazônia show that when PES is coordinated with local policies, it transcends its compensatory function to become a structuring axis of fair, inclusive and climate-resilient food systems.

THE PACT BETWEEN FOOD, CLIMATE AND TERRITORY

From the discussion above and the correlations between municipal food policies, urban food systems and economic instruments (such as Payment for Environmental Services), it becomes clear that a transformation is underway: one that places cities at the forefront of addressing the climate emergency. The EAT-Lancet Commission proposes that fair, healthy and sustainable food systems can save up to 15 million lives per year and reduce agricultural emissions by 20% by 2050 (*Rockstrom et al, 2025)*. This calls for policies that make healthy diets accessible, convenient, and culturally appropriate, and ensure the right to decent work and social representation.

The analysis of the NDC-Food Systems Scorecard is a warning: even countries that are leaders in biodiversity and agroecology, such as Brazil, have not yet placed food in the center of their climate goals. At COP 30, Brazil will have the historic opportunity to affirm that the path to confronting climate emergency begins with the transition of food systems. This means promoting public policies that shorten the distances between those who plant and those who consume, that value fresh and regional foods, strengthen agroecology and short marketing circuits, that expand access to adequate and healthy food, and that recognize the centrality of food systems in the low-carbon economy (FOOD SYSTEMS NDC, 2025).

In this context, recent crises, from floods in southern Brazil to droughts in the Amazon, have exposed the fragility of urban infrastructure, supply systems, and food policies. Yet, they have also revealed the strength of community networks, solidarity kitchens, urban gardens and short marketing circuits, that have responded with creativity and solidarity to climate impacts. These initiatives, which spring from civil society and local governments and are rooted in innovative public policies, show that it is possible to reshape the relationship between food and the environment.

The Comida do Amanhã Institute and Iclei South America have demonstrated that food systems are not only a vulnerable sector to the climate crisis, but a strategic key to mitigating and addressing it. By understanding food systems as a social technology and a vector of transformation, we open a pathway to more integrated public policies, which connect health, the environment, economy and culture. LUPPA symbolizes this collective intelligence in action. It arises from the understanding that cities are territories of democratic experimentation and that, from them, it is possible to weave a new low-carbon, fair and agroecological food economy. The experiences gathered here show that local solutions can generate systemic impacts, repositioning Brazil as a reference in climate and food innovation.

At the same time, instruments such as Payment for Environmental Services (PES) show that environmental conservation and food production can go hand in hand. PES, when coordinated with food and nutritional security policies, recognizes and pays the guardians of biodiversity, family farmers and traditional peoples and communities, and inserts them fairly in climate transition economies.

This integration between local governments, communities and ecosystems is the heart of the new paradigm that Comida do Amanhã and ICLEI South America intend to bring to COP30 through this Position Paper. It is a pact based on three interdependent dimensions:

1 Food as the axis of climate action: sustainable food systems are concrete instruments for mitigation and adaptation, reducing emissions and strengthening the resilience of territories.

2 Climate as a cross-cutting agenda for public policies: the most effective climate responses are those that integrate social, environmental and cultural dimensions, from community kitchens to standing forests.

3 Territory as a unit of transformation: rural and urban areas, and traditional communities form a living system; Strengthening their ties is essential to ensure food sovereignty, socio-environmental justice, and ecological transition.

These dimensions embody a systemic vision of the future: food nourishing the planet, cities caring for their waters and soils, and public policies recognizing the value of those who produce and protect territories and life.

This document seeks to highlight the role of food policies as essential elements of climate action and to offer subsidies for Brazil, in all its spheres of government and society, to strengthen the integration between food, climate and sustainable development. By proposing the recognition of food systems as a strategic field of climate policy, Comida do Amanhã Institute and ICLEI South America invite COP Special Envoys, local governments, partners, and other society actors to expand the dialogue and cooperation around a fair, territorialized, and evidence-based transition. Facing the climate emergency and the opportunity for collective construction represented by COP 30, we reaffirm the need to place food systems at the center of solutions for a more sustainable and resilient future.

Through this document, we seek to reaffirm that the ecological transition must also be a food and cultural transition, one capable of addressing and reducing inequalities, regenerating ecosystems and restoring to food the role it always held: that of sustaining life and ways of living. By placing food systems as a relevant aspect of climate decisions, COP 30 in Brazil can inspire the world to adopt solutions that are not limited to reducing emissions, but that extend further, restoring the social and ecological fabric currently disrupted by the climate crisis.

Because taking care of food is taking care of life.

And what we eat changes the world.

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